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JCT 101
Sp 100
11/5/03

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OCT 28 2003

GROUP 3600

AN IMPROVED INFORMATION MARKING PLATE

BACKGROUND OF THE INVENTION

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1) Field of the Invention

[0001] The present invention relates to an improved information marking plate in which information is transcribed or recorded for easy reference. Although the present invention has many applications, a primary objective of the present invention is that it be used to record basic and essential electrical information concerning electric fixtures, receptacles, and devices, in both high voltage and low voltage environments.

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[0002] A preferred embodiment of the invention is a stainless steel marking plate wherein certain information regarding low voltage outdoor landscape lighting fixtures, including, but not limited to, information such as wiring systems or runs, transformers, lamp size, type and wattage, circuitry, and other relevant information generally relied upon by electricians and those skilled in the art, is recorded to an information template, which has been previously recorded onto at least one side of the marking plate. At the time that the fixture is installed, specific electrical information concerning the low voltage electric landscape lighting fixture is then recorded to the information template by punching a hole(s) or otherwise marking the corresponding, selectable data box(es) or area(s) of the information template on the marking plate. After the specific electrical information is recorded to the information template, the entire information marking plate is then attached to the corresponding fixture for simple and easy reference. This allows for use in an infinite number of circumstances for all types of electrical fixtures and is not

a pre-recorded fixture-specific nameplate that was attached to the device at the time of manufacture. Such information would not be known at that time and only becomes known to the electrician or other individual skilled in the art at the time that the device or fixture is actually installed.)

5 [0003] Once the corresponding information of an electric fixture is appropriately recorded to the information template on the marking plate, the marking plate is attached or affixed to the corresponding fixture of which the information was recorded. Thereafter, when information as to that specific fixture is needed, it may be easily and readily obtained directly from the marking plate attached to that fixture. Because the
10 information marking plate is made of stainless steel or any other rigid, non-corrosive material commonly known to those skilled in the art, the marking plate is intended to be permanent and will generally last the life of the corresponding fixture, if not longer.

[0004] In an additional embodiment of the present invention, the improved information marking plate is used with standard, high voltage electrical wiring, circuitry and fixtures.

15 With this embodiment, information regarding a fixture's corresponding circuit number, number of other fixtures on that circuit, lamp size, type and wattage, and other relevant information generally relied upon by electricians and those skilled in the art, is recorded on the marking plate for simple and easy reference. This information is hole punched into, or marked, stamped or etched onto the information template, which has been
20 previously recorded onto at least one side of the marking plate. Again, the marking plate is then attached directly either to the interior or exterior of the corresponding fixture or receptacle, which includes, but is not limited to, indoor and outdoor electric junction boxes, fixtures, receptacles, switch boxes, outlets, lighting fixtures, or any other relevant

electric fixture, box or device generally used by electricians and those skilled in the art. Because the marking plate is made of stainless steel or any other rigid, non-corrosive material commonly known to those skilled in the art, the marking plate is intended to be permanent and will generally last the life of the corresponding fixture, if not longer.

5 [0005] One of the many problems encountered with low or high voltage electrical circuitry or systems is the inability to easily and readily ascertain basic information concerning a specific fixture or device within that circuit system. Such information generally includes, but is not limited to, wiring run or line identification, corresponding circuit or fuse identification, lamp type, size and wattage, voltage, and any other
10 information deemed relevant and relied upon by electricians and those skilled in the art. Often, when this information is required, individuals are faced with the difficult and time-consuming task of turning on and off specific transformers, fuse units, or circuits to determine which electrical circuitry corresponds to a particular fixture, outlet, switch box, receptacle or other electric device used within an electrical wiring system or circuit. The
15 present invention addresses and solves all of these problems.

[0006] Other basic information with respect to low voltage outdoor landscape lighting fixtures also requires time consuming investigation. For example, with regard to low voltage outdoor electric landscape lighting, an additional and more complex problem occurs with the use of multiple lighting fixtures associated with such low voltage systems, wherein much of the wiring is underground and where it is difficult to determine specific wiring configurations and basic transformer and lamp information. Typically, with respect to low voltage outdoor electric landscape lighting, high voltage electric power is provided to a low voltage power regulator source such as a transformer. The

transformer regulates or transforms the high voltage electric power down to low voltage, which is then used to power the outdoor electric landscape lighting fixtures. Low voltage electric power runs from the low voltage power source or transformer, via electric wiring, and almost always underground, to multiple low voltage electrical fixtures. After the 5 wiring leaves the transformer, it is often split or “spliced” into multiple wiring runs to power the landscape lighting fixtures. This network of multiple wires and splices can be complex. Obtaining information regarding a particular fixture’s corresponding wiring or line run number and transformer identification is therefore burdensome, difficult and time consuming. The present invention squarely resolves this problem by recording all 10 relevant information concerning that fixture to an improved information marking plate, which is then affixed directly to the fixture.

[0007] With respect to low voltage electric landscape lighting, the preferred embodiment of the present invention discloses a stainless steel plate that is rectangular in shape, approximately two (2) inches by three (3) inches in size and approximately one-sixteenth 15 (1/16) of an inch in thickness or width, (i.e., twenty-two (22) gauge thickness) wherein an information template is recorded to at least one side of the plate by engraving, writing, laser etching, or acid etching, or by printing using baked enamel, or by any other means generally known to those skilled in the art, for creating a durable, non-corrosive and permanent data template on the surface of at least one side of the marking plate. The 20 information template contains all relevant, selectable information regarding a particular lighting or wiring run, transformer identification, lamp type, size and wattage used in the corresponding fixture, number of electrical fixtures on a particular wiring run, and any other information deemed relevant by an electrician or one skilled in the art. As an

example, in one embodiment, the information template is designed and organized to accommodate up to 150 separate wire runs, 38 separate transformers, as well as, multiple lamp sizes, including wattage. The information template also provides a miscellaneous category for additional lighting characteristics including kilowatt-hours and additional

5 bulb characteristics such as bulb type, which would include, but not be limited to, halogen, bayonet or an incandescent bulb. The information template, permanently recorded to the marking plate, comprises a single and effective means of providing an all-encompassing data checklist or chart, from which specific information concerning a particular fixture or receptacle is selected and marked for easy future reference.

10 Generally, information regarding a specific fixture is recorded onto the marking plate at the time the fixture is installed since most of the information to be recorded only becomes known to the electrician or other individual skilled in the art at the time that the device or fixture is actually installed. As such, there is a need for the present disclosure since the prior art is limited with respect to the amount of information that may be recorded for a

15 device or fixture.

[0008] Generally, the relevant, selectable information is recorded on the marking plate at the time that a fixture is actually connected to the wiring and installed, when such information is immediately known to or by one installing the fixture. The recording of such information is easily accomplished by appropriately marking the information template on the marking plate. Marking the information template may take many forms, including punching a hole in the corresponding, selectable information data area or box of the template, engraving or etching that area, or otherwise marking that area with durable, permanent and/or water-proof ink, paint or other media. Once a particular

electrical fixture is installed, the relevant information would be recorded on the marking plate by way of a hole punch, stamp marking or a writing utensil over the corresponding, selectable information contained on the marking plate. For example, if one wishes to record wire run four (4), transformer two (2), lamp size twenty- five very narrow (25VN) 5 and fixture three (3) of six (6), one would simply mark the corresponding, selectable boxes and/or areas on the information template that has been previously recorded to the surface of at least one side of the marking plate.

[0009] After the appropriate information is recorded to the information template on the marking plate, the marking plate is then attached to the corresponding electrical fixture. 10 This may be accomplished by a variety of methods. An information marking plate may be attached to a fixture, such as a lighting fixture, splice fixture or receptacle, switch box and the like, by a ring clasp, analogous to a key chain feature, or through any other fastening device commonly known to those skilled in the art, such as a screw, rivet or adhesive backing. As noted, the information marking plate may be utilized for both 15 outdoor and indoor electrical fixtures, which include, but are not limited to, lighting fixtures, electric wiring splice fixtures or receptacles, junction boxes, switch boxes, outlets, or any other electric fixture, receptacle or device, and affixed in such a way as to make the marking plate itself inconspicuous. In addition, through the use of a stainless steel marking plate, same can be affixed to an outdoor fixture in an inconspicuous area; 20 below ground level if necessary, without worry that the marking plate would corrode. With respect to interior electrical fixtures, the marking plate could be placed in a variety of areas out of sight, for example, behind a wall plate, on the underside of a lampshade,

or perhaps on the interior or exterior of any of the electric boxes or receptacles commonly known to and utilized by electricians and those skilled in the art.

[0010] Having all of the necessary electrical information affixed to the electrical fixture itself provides a fast, simple and effective method of compiling key electrical data that 5 would not have otherwise been known but for painstaking trial and error. The present invention is a simple and ready means for permanently recording substantial and detailed information for a variety of electric fixtures directly to such fixtures.

2) The Prior Art

[0011] There have been attempts in the past to create a variety of electrical schematic 10 and device tags for electrical equipment, fixtures and receptacles. None of these disclosures, however, employ the same approach and flexibility as the present invention. Nor do they address the same needs that the present invention satisfies. Nor do any of the prior disclosures provide the ability to record the amount, scope and level of information as the present invention. For example, U.S. Patent No. 4,479,317 discloses a transparent 15 plate which is oversized to extend beyond the electrical receptacle so as to permit the placement of an electrical circuit identification label to be affixed in a permanent and protective manner to remain always visible. Disadvantages of U.S. Patent No. 4,479,317 are that the disclosure is designated for interior electrical and wall outlet use only and that the label is always visible.

20 [0012] U.S. Patent No. 4,734,638 discloses a complex handheld detector-indicator device, which when used in conjunction with multiple frequency pulses, assists in the identification of indoor wiring circuits. The example specifically referenced in that disclosure is a building that is undergoing subdivision into condominium or apartment

units. While this device might very well assist in the identification of multiple electrical wiring schemes, its mere description raises issues of cost effectiveness and ease of use. Moreover, unlike the present invention, the disclosure in U.S. Patent No. 4,734,638 fails to provide a simple and permanent method or apparatus for recording information. In 5 addition, U.S. Patent No. 4,734,638 does not provide for the amount and level of information that may be recorded by the present invention.

[0013] U.S. Patent No. 5,487,666 references a detailed floor plan representative of a computer local area network to create a network central controller to simplify access and installation of network related details. There is no reference to the identification of 10 electric circuitry as is disclosed by the present invention.

[0014] U.S. Patents Nos. 5,693,911, 5,832,641 and 6,178,681 all disclose various labeling and identification methods for electrical devices. U.S. Patent No. 5,693,911 discloses an adhesive label to be installed on the interior surface of an electrical cover plate with specific reference to the recording of information related to the type of paint 15 used in a particular room. Significantly, there is no reference in this disclosure to electronic circuitry or any other relevant electrical information regarding a fixture.

[0015] U.S. Patent No. 5,832,641 discloses a wiring device circuit identification to be installed between the plug-receiving portion of an electric outlet and the exterior wall plate. This certainly does not address the difficulty in determining electrical information 20 as related to exterior landscape lighting, as well as, interior electrical fixtures and complex wiring configurations. There is also the added difficulty in that the information recorded is not readily accessible.

[0016] Finally, U.S. Patent No. 6,178,681 discloses a merchandising tag for use on displayed electrical devices. The claimed tag is for merchandising purposes only and its objective is to provide an attractive method of providing information to customers about the particular displayed product. Noticeably absent is any reference to any information 5 concerning electrical circuitry, wiring, and the like.

[0017] There therefore remains a need for an easily accessible electrical information marking plate, which can be attached to any electrical fixture, receptacle or device, in an inconspicuous location, if so desired, that permanently records all of the necessary and relevant information concerning that fixture, receptacle or device. The present invention 10 squarely and effectively satisfies this need. The present invention enables one to quickly and easily obtain relevant information concerning an electrical fixture, receptacle or device, including, but not limited to, wiring or run identification, transformer identification and information, lamp size, type and wattage, corresponding circuit breaker or fuse identification, number of fixtures on a particular wiring or line run, and any other 15 information deemed relevant by an electrician or one skilled in the art.

SUMMARY OF THE INVENTION

[0018] The present invention is directed to an improved information marking plate, 20 where information is recorded for easy reference. In the case of low voltage electric landscape lighting fixtures, the information to be recorded would include, but not be limited to, the particular electric circuit, such as the lighting or wiring run, transformer identification information, lamp size and type, and number of other electrical lighting fixtures on a particular wiring run. Attached to each fixture within a low voltage electric 25 landscape lighting scheme, the improved information marking plate is available for easy

reference. The primary objective of the present invention is to alleviate the difficulties associated with identifying complex electrical circuitry, particularly that which is associated with outdoor landscape lighting which likely contains a network of underground wiring.

5 [0019] There has thus been outlined, rather broadly, the more important features of the invention in order that the detailed description thereof that follows may be better understood, and in order that the present contribution to the art may be better appreciated. There are, of course, additional features of the invention that will be described hereinafter and which will form the subject matter of the claims appended hereto.

10 [0020] In this respect, before explaining at least one embodiment of the invention in detail, it is to be understood that the invention is not limited in its application to the details of construction and to the arrangements of the components set forth in the following description or illustrated in the drawings. The invention is capable of other embodiments and of being practiced and carried out in various ways. Also, it is to be
15 understood that the phraseology and terminology employed herein are for the purpose of description and should not be regarded as limiting.

[0021] As such, those skilled in the art will appreciate that the conception, upon which this disclosure is based, may readily be utilized as a basis for the designing of other structures, methods and systems for carrying out the several purposes of the present
20 invention. It is important, therefore, that the claims be regarded as including such equivalent construction insofar as they do not depart from the spirit and scope of the present invention.

[0022] Further, the purpose of the foregoing abstract is to enable the U.S. Patent and Trademark Office and the public generally, and especially the scientists, engineers and practitioners in the art who are not familiar with patent or legal terms or phraseology, to determine quickly from a cursory inspection the nature and essence of the technical disclosure of the application. The abstract is neither intended to define the invention of the application, which is measured by the claims, nor is it intended to be limiting as to the scope of the invention in any way.

[0023] The present invention is comprised essentially of a marking plate, which contains both a front side and a back side, with an information template printed, engraved, etched, or baked-enamel painted onto the surface of at least one side, usually the front side of the marking plate. Ideally, the marking plate is comprised of a rigid, non-corrosive material, such as stainless steel, so as to avoid corrosion, fading or deterioration in an outdoor environment. The information template is generally recorded onto the front side of the marking plate and provides all of the necessary and relevant, selectable information as to a particular electrical fixture, receptacle, device, switch, outlet, box or any other such electrical device commonly used by electricians and those skilled in the art. During installation of the electrical fixture or other such device, all relevant information regarding particular electric circuitry for that fixture or device is collected and recorded at that time, in the appropriate, selectable marking area(s) of the information template.

Recording the information with respect to a particular fixture is accomplished by marking the corresponding, selectable data area(s) or box(es) on the information template on the marking plate. Marking the information template may take many forms, including, but not limited to, punching a hole in the corresponding information data area or box of the

template, engraving or etching that area, or otherwise marking that area with durable, permanent and/or water-proof ink, paint or other such media. The information marking plate, now with appropriate and specific information concerning the corresponding electric fixture, is then affixed to said fixture or electrical device, by way of a fastener or 5 adhesive, generally in an inconspicuous location so as not to distort any surrounding aesthetics, yet readily available to anyone needing relevant electrical information concerning that device or fixture.

BRIEF DESCRIPTION OF THE DRAWINGS

[0024] FIG. 1 is a perspective view of an improved information marking plate of the 10 present invention, wherein an information template has been recorded onto the surface of one side of the improved information marking plate.

[0025] FIG. 2 is an environmental, perspective view of the improved information marking plate according to FIG. 1, illustrating the improved information marking plate being secured to the exterior surface of a low voltage electric power transformer by 15 securing means in the form of two pop-rivets.

[0026] FIG. 3 is an environmental, side view of the improved information marking plate according to FIG. 1, illustrating the improved information marking plate being secured to an outdoor spotlight fixture by securing means in the form of a ring clasp.

[0027] FIG. 4 is an environmental, side view of the improved information marking plate 20 according to FIG. 1, illustrating the improved information marking plate being secured to an electric splice device or receptacle, demonstrating an incoming electric line from a power source and numerous outgoing wiring runs, by securing means in the form of a ring clasp.

[0028] FIG. 5 is an environmental, side view of the improved information marking plate according to FIG. 1, illustrating the improved information marking plate being secured to the in-ground lamp fixture by securing means in the form of a ring clasp, with the improved information marking plate resting at ground level.

5 [0029] FIG. 6 is an environmental, perspective view of the improved information marking plate according to FIG. 1, illustrating the improved information marking plate being secured to the exterior surface of a low voltage electric power transformer by securing means in the form of two screws.

10 [0030] FIG. 7 is a perspective view of the improved information marking plate according to FIG. 1, wherein an adhesive material has been applied onto the surface of a second side of the improved information marking plate.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

15 [0031] A preferred embodiment of the invention is illustrated in FIG. 1 and is designated as an improved information marking plate 10. The improved information marking plate 10 comprises two flat surfaces for receiving information for recording: a front side 11, and a back side 12. In FIG. 1, an information template 13 has been recorded to the front side 11, of the information marking plate 10, wherein an array of selectable information generally relied upon by electricians and those skilled in the art with respect to low voltage outdoor electric landscape lighting is recorded.

20 [0032] In addition, in the preferred embodiment of FIG. 1, the information marking plate 10 is made of stainless steel, is rectangular in shape and is approximately two (2) inches by three (3) inches in size and approximately one-sixteenth (1/16) of an inch thick or wide. However, the size of the information marking plate 10 may be modified depending

on dimensional requirements. The information template **13** may be recorded to either the front side **11** or the back side **12** of the information marking plate **10** by engraving, laser etching, or acid etching, by printing, using baked enamel paint, or by any other media generally relied upon by those skilled in the art, so as to create a durable non-corrosive
5 and permanent information template **13** to the surface of the information marking plate
10.

[0033] In the preferred embodiment of the invention with respect to low voltage outdoor landscape lighting, FIG. 1 shows an information marking plate **10** in which the information template **13** recorded on the front side **11** of the information marking plate **10**
10 comprises an array of several categories of selectable information typically relied upon by electricians and those skilled in the art, designated therein as Wire Run **14**, Transformer **15**, Lamp **16** and Fixture **17** categories. More specifically as shown in FIG. 1, the selectable Wire Run **14** category is designed to accommodate up to 150 separate wire runs, with runs 1 through 75 corresponding to the A designation and runs 76 through
15 150 corresponding to the B designation within the Wire Run **14** category. In addition, FIG. 1 shows a selectable Transformer **15** category to address the identification of up to 38 separate transformers with transformers 1 through 19 corresponding to the A designation and transformers 20 through 38 to the B designation of the Transformer **15** category. Relevant, selectable lamp information including bulb type, size, wattage, as
20 well as, a miscellaneous category for additional lighting characteristics including kilowatt-hours and other noted bulb types, including but not limited to halogen, bayonet and incandescent bulbs is referenced in the Lamp **16** category. Lastly, the information marking plate **10** provides one skilled in the art with a Fixture category **17** which

references the number of fixtures on a particular wire run. In an additional embodiment of the present invention, the information marking plate **10** may be used in an analogous manner with standard, higher voltage electrical wiring, circuitry and fixtures as well.

[0034] Once a particular electrical fixture is installed, the relevant information regarding 5 the fixture would then be recorded on the information marking plate **10** by way of hole punching, stamp marking or a writing utensil over the corresponding, selectable data area(s) or box(es) of the information template **13** contained on the information marking plate **10** itself. For example, if one skilled in the art wishes to record wire run four (4), transformer two (2), lamp size twenty-five very narrow (25VN) and fixture three (3) of 10 six (6), one would simply mark the corresponding, selectable designations noted in the Wire Run **14**, Transformer **15**, Lamp **16** and Fixture **17** categories on the information marking plate **10** itself as depicted in FIG. 1.

[0035] In addition, FIG. 1 shows an information marking plate **10** which consists of an opening or hole **18** by which the information marking plate **10** may be attached to a 15 particular electrical device and/or fixture. It is important to highlight that the information marking plate **10** may be attached by a variety of methods in addition to the one shown.

[0036] FIG. 2 shows an environmental, perspective view of the information marking plate **10** being secured to the exterior surface of an electric transformer **20**. The attachment or securing means shown in FIG. 2 comprises two (2) pop-rivets **19** that are 20 inserted through two (2) openings or holes **18** of sufficient size to accept the rivets **19** located in the upper corners of the information marking plate **10**, and into the transformer **20**, thereby securing the information marking plate **10**, to the exterior surface of the transformer **20**.

[0037] FIG. 3 shows an information marking plate 10 secured to an outdoor spotlight fixture 30 by a ring clasp 31. More specifically, the ring clasp 31 is inserted through the opening or hole 18 of the information marking plate 10 and also through a hole in the base 32 of the outdoor spotlight fixture 30.

5 [0038] FIG. 4 shows a splice fixture 40 used in a complex wiring scheme or network, with one (1) incoming wire 41 passing through the splice fixture 40 and five (5) outgoing wires 42 emanating from the splice fixture 40. An information marking plate 10 is attached or secured to the splice fixture 40 by a ring clasp 31.

10 [0039] FIG. 5 shows an environmental, side view of an alternate outdoor lamp fixture 50, wherein the base 51 of the outdoor lamp fixture 50 is placed in the ground 52 and wherein the information marking plate 10 remains visible above ground and is secured to the base 51 of the outdoor lamp fixture 50 by a ring clasp 31.

15 [0040] FIG. 6 shows an environmental, perspective view of the information marking plate 10 being secured to the exterior surface of an electric transformer 20. The attachment or securing means shown in FIG. 6 comprises two (2) screws 61 that are inserted through two (2) openings or holes 18 of sufficient size to accept the screws 61 located in the upper corners of the information marking plate 10, and into the transformer 20, thereby securing the information marking plate 10, to the exterior surface of the transformer 20.

20 [0041] FIG. 7 shows an adhesive material 71 which has been applied onto the surface of the back side 12 of the information marking plate 10.

[0042] As to the manner of usage and operation of the present invention, the same should be apparent from the above description. Accordingly, no further discussion relating to the manner of usage and operation will be provided.

[0043] With respect to the above description then, it is to be realized that the optimum 5 dimensional relationships for the parts of the invention, to include variations in size, materials, shape, form, function and manner of operation, assembly and use, are deemed readily apparent and obvious to one skilled in the art, and all equivalent relationships to those illustrated in the drawings and described in the specification are intended to be encompassed by the present invention.

10 [0044] Therefore, the foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.